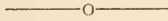


frontal bristles directed backward, two orbital bristles; front, face and cheeks of a clear golden-yellow, shading to brassy or cinereous in spots on front, pile on sides of face and cheeks golden-yellow; antennæ brownish, first two joints dark, base and posterior half of third rose-rufous, third joint one and a half times as long as second; arista blackish, first two joints elongate and of equal length; proboscis black, palpi elongate, widened and enlarged toward tip, rufous-yellow, occiput brassy, thickly clothed with brassy pile. Thorax black, thinly silvery, with four narrow vittæ, the outer ones heavier and interrupted at suture; humeri and pleuræ black, very faintly silvery; scutellum deep brownish rufous, very spiny. Abdomen deep brownish rufous, with purplish reflections, densely beset everywhere, except on sides anteriorly, with spiny macrochætæ; venter with macrochætæ on median portion and on sides posteriorly. Legs black, front femora somewhat silvery on outside, tibiæ spiny, especially middle and hind pairs, claws and pulvilli a little elongate, pulvilli tawny yellowish; front tarsi not dilated. Wings brownish fuscous, veins blackish at base; tegulæ fuscous, halteres rufous. Length of body 11 mm.; of wing 9.5 mm.

Described from one specimen; Cinchona, Jamaica. Collected by Mr. W. Fawcett, Head of the Botanical Department of Jamaica.



### Our ATYPIDÆ and THERAPHOSIDÆ.

By NATHAN BANKS, Washington, D. C.

These two families of spiders contain what are commonly called tarantulas, the Mygalidæ of older authors. They have four lung-sacs, the fang of the mandibles moves vertically, the legs are short and stout. The two families may be tabulated thus:

Maxillæ broadened at base, palpi lateral . . . . . **Atypidæ.**  
 Maxillæ not broadened at base, palpi terminal, or almost so. **Theraphosidæ.**

Of Atypidæ we have but one genus, *Atypus*; two species of which have been described from the Western States. *A. bicolor* Lucas may, if any one is fortunate enough to obtain a specimen, form another genus on account of the arrangement of the eyes. It is probably the species to which Hentz refers as the "*A. rufipes* found by Mr. Milbert." *A. bicolor* Lucas is black, with red legs; only known from "Philadelphia." *A. niger* Hentz is wholly black; from Mass., Md., D. C., Va., N. C.

The Theraphosidæ may be divided into two subfamilies:

Inner distal angle of maxillæ slightly prolonged, palpi somewhat lateral. **Eriodontinæ.**  
 Inner distal angle of maxillæ not prolonged, palpi terminal. **Theraphosinæ.**

The Eriodontinæ are represented by three genera:

A. S. E. the largest eyes . . . . .	2.
A. M. E. the largest eyes . . . . .	<b>Anthrodiætus.</b>
2.—S. E. farther apart than M. E. . . . .	<b>Myrmekiaphila.</b>
S. E. not farther apart than M. E. . . . .	<b>Nidivalvata.</b>

In *Anthrodiætus* the S. E. are widely separated, the anterior row is longer than the posterior row and recurved. One species, *A. unicolor* Hentz is described from Alabama. *Myrmekiaphila* has the S. E. widely separated, but the anterior row is not longer than the posterior row, and is slightly procurved. One species, *M. foliata* Atk. is described from North Carolina. *Nidivalvata* has the S. E. close together or touching, anterior row procurved, a little shorter than the posterior row. Two species are described, both from North Carolina, by Prof. Atkinson:

S. E. and P. M. E. touching, in one group . . . . .	<b>N. marxii.</b>
S. E. and P. M. E. distinctly separated . . . . .	<b>N. angustata.</b>

The Theraphosinæ may be divided into two tribes:

Three claws to tarsi . . . . .	<b>Trionchi.</b>
Two claws to tarsi . . . . .	<b>Dionchi.</b>

The Dionchi have one genus, *Eurypelma*, in Western States, of which five species are described. These are the genuine tarantulas. As the species are extremely close, a key will not be given, but the species arranged in two series according to locality. California: *E. californica* Auss., *E. rileyii* Marx, *E. leiogaster* Auss. Southern W. S.: *E. hentzii* Girard, La., Tex., Kans.; *E. steindacherii* Auss., N. Mex. *E. hentzii* is the most common; *E. mordax* Auss. is the same as *E. hentzii* Girard.

The Trionchi are divided into two groups:

Median groove longitudinal . . . . .	<b>Mecicobothri.</b>
Median groove transverse . . . . .	<b>Aepicephali.</b>

#### Group MECICOBOTHRI.

Spinnerets four . . . . .	<b>Brachybothrium.</b>
Spinnerets six . . . . .	2.
2.—Eyes about equal in size, third article of spinnerets but little longer than second . . . . .	<b>Atypoides.</b>
A. M. E. much smaller than others, third article of spinnerets much longer than second . . . . .	<b>Hexura.</b>

*Brachybothrium* is represented by two species, one *B. pacificum* Simon from Wash. State, the other *B. accentuatum* Simon from

North Carolina. *Hexura* and *Atypoides* have each one species: *H. picea* Simon from Wash. State; *A. riversi* Cambr. from Cala.

Group AEPICEPHALI.

Tibia III flattened at base . . . . .	<b>Pachylomerus.</b>
Tibia III not flattened at base . . . . .	2.
2.—Lip much longer than broad at base . . . . .	5.
Lip at most as long as broad at base . . . . .	3.
3.—Abdomen truncated behind . . . . .	<b>Cyclocosmia.</b>
Abdomen rounded behind . . . . .	4.
4.—Mandibles pointed in front . . . . .	<b>Cteniza.</b>
Mandibles rounded in front . . . . .	<b>Bolostromus.</b>
5.—Eyes crowded together in two curved parallel rows . . . . .	<b>Madognatha.</b>
Eyes more separated, in two rows not parallel . . . . .	<b>Chlosterochilus.</b>

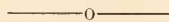
*Cyclocosmia truncata* Hentz from Alabama. *Cteniza californica* Cambr. from California. *Bolostromus fluviatilis* Hentz from Alabama. *Maclognatha abbottii* Lucas from Georgia and "Philadelphia." *Chlosterochilus gracilis* Hentz from Alabama. *Chlosterochilus pertyi* Lucas, Ann. Ent. Soc. Fr., Second Series, Vol. III, 1845, p. 60; not Vol. VI, p. 377, as given by Marx in the Catalogue. This was described as *Actinopus* by Lucas, but the eyes do not differ in arrangement from *Ch. gracilis*; the A. S. E. are, however, much larger than the A. M. E., while in *Ch. gracilis* the A. S. E. are about equal to the A. M. E. It was described from "Amerique du Nord." Dr. Marx, in his Catalogue, also places *Pachyoscelis rufipes* and *Theragretes walckenaerii* (the male of *Sphodros abbottii* according to Walckenaer) as in our fauna. This is not the case, as may be seen from the following quotation from Lucas in his article on the subject: . . . "car l'espece que M. Walckenaer regarde comme le male du *S. abbottii* ♀ se trouve dans le meme localité que mon *Pachyoscelis rufipes*, l'un et l'autre ont été trouves au Brésil dans les Campos geraes."

Of *Pachylomerus* we have two species. There seems to be considerable trouble in the genus. Prof. George Atkinson described three species as new, and redescribed *P. carolinensis* Hentz, and suggested that *P. solstitialis* Hentz was the male of the same species. It is very probable that *P. carolinensis* and *P. solstitialis* are the same, though there may be a slight difference in the proportionate width of the cephalothorax. But as *P. solstitialis* comes before *P. carolinensis* in the descriptions,

and as it is a male, I think there is no doubt but what the species should be called *P. solstitialis* Hentz. Moreover, the species identified, described and figured by Prof. Atkinson as *P. carolinensis* does not agree with Hentz's figure of that species. But *P. turris* Atk. does agree with Hentz's figure of the eyes. Therefore I consider *P. turris* = *P. carolinensis* = *P. solstitialis*. I see no characters of specific value between Prof. Atkinson's *P. carabivorus*, *P. carolinensis* and *P. quadrispinosus*. The variation of width in the cephalothorax is so slight as to be of no value; the arrangement of spines and teeth on claws are not of specific importance. The males are not known. There is no great difference in the eyes. I thus write the species under one name, *P. carabivorus* Atk., at least until the males show differences in the palpal structure. The two species may be separated thus:

P. S. E. as near to A. S. E. as to P. M. E. . . . . **P. solstitialis.**  
 P. S. E. nearer to P. M. E. than to A. S. E. . . . . **P. carabivorus.**

*P. audouinii* Lucas, 1837, described from "Amerique du Nord;" if from W. S. may be one of the above species. Lucas placed it in *Actinopus*; Ausserer says it is a *Pachylomerus*; why, I do not know.



## A NEW DALMANNIA FROM CALIFORNIA.

By D. W. COQUILLET, Los Angeles, California.

Up to the present time only two species of the Conopid genus *Dalmannia* have been reported from America north of Mexico. To these I now add a third, and present a table for identifying these three species :

- |   |                       |
|---|-----------------------|
| 1. Scutellum and humeri marked with bright yellow . . . . .   | 2.                    |
| Scutellum and humeri wholly black . . . . .   | <b>vitiosa</b> n. sp. |
| 2. The yellow on hind margins of abdominal segments three and four prolonged forward each side, nearly crossing the segments; cheeks of male yellow . . . . . | <b>picta</b> Will.    |
| The yellow not prolonged forward each side; cheeks of male with a large black spot . . . . .  | <b>nigriceps</b> Lw.  |

**Dalmannia vitiosa** n. sp. ♂.—Front yellowish brown, darkest on the upper half, where the dark color forms two indistinct stripes; antennæ black, apex of style yellowish; face and cheeks yellow, the former with two brown median stripes; occiput black. Thorax, pleura, breast and scutellum wholly black. Abdomen black, hind margin of the second,